

**Notice of Allowability**

Application No.

09/973,264

Applicant(s)

SENDELWECK, GENE KARL

Examiner

Devona E. Faulk

Art Unit

2644

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 9/9/2005.
2. ☒ The allowed claim(s) is/are 6,7,10-12 and 14-16,18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 9/9/2005
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_.
- ☒ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, filed 9/9/2005, with respect to the rejection(s) of claim(s) 1-18 under 102(b) and 103(a), with regards to the Monti reference, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection would have been made in view of Spridon. The applicant agreed to an examiner's amendment to put claims in allowable form.
2. Claim 9 is cancelled.
3. Claim 18 was indicated as allowable if the 112 issue was addressed. The applicant has amended claim 18 and argued persuasively to overcome the 112 rejection.

### ***Drawings***

4. The drawings are objected to because Figures 3 and 4 illustrate a transistor 59 that should be indicated as 56, see paragraph 22 of the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and

where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### **EXAMINER'S AMENDMENT**

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Reitseng Lin (Reg. No. 42,804) on 1/26/2006.

The claims are amended as follows:

**Claims 1-5,8,9,13.17:** Cancel.

**Claim 6, line 2:** after "providing a" , delete "first operational" and insert - - de-emphasis- - .

**Claim 6, line 4:** before "pin" , delete "the" and insert - - said - - .

**Claim 6, line 5:** after “providing”, delete “ a second operational” and insert an attenuation - - .

**Claim 6, line 6:** after “wherein”, insert - - when impedance present at said pin is at a first value, the first signal is switched “off” and - - .

**Claim 6, line 7:** after “switched”, delete “ “in” and out” and insert - - to a signal coupling mode - - .

**Claim 6, line 7:** before “pin” , delete “the” and insert - - said - - .

**Claim 6, line 7:** after “when”, insert - - the impedance present at said pin is at a second value higher than the first value, the first signal is switched “on” and - - .

**Claim 6, line 8:** replace “in” with - - to a non-signal coupling mode - - .

**Claim 6, line 8:** delete “the first signal is disabled”.

**Claim 6, line 8:** before “pin” , delete “the” and insert - - said - - .

**Claim 11, line 2:** after “providing” , delete “an operational” and insert - - de-emphasis- - .

**Claim 11, line 3:** after “and” insert - - means for providing an attenuation function to the first signal of the integrated circuit, and - - .

**Claim 11, line 4:** before “pin” , delete “the” and insert - - said - - .

**Claim 11, line 5:** after “circuit”, delete “ , “ and insert so that the means for providing the attenuation function operates on the second signal, - - .

**Claim 11, line 6:** before “pin” , delete “the” and insert - - said - - .

**Claim 11, line 7:** before “pin” , delete “the” and insert - - said - - .

**Claim 11, line 7:** after "pin", delete "." and insert - - ; and de-coupling of the second signal to said pin switching "on" the presence of the first signal at said pin, wherein impedance present at said pin when the second signal is coupled is lower than impedance present at said pin when said second signal is de-coupled - - .

**Claim 15, line 3:** after "providing a", delete "first operational" and insert - - de-emphasis- - .

**Claim 15, line 5:** after "providing", delete " a second operational" and insert an attenuation - - .

**Claim 15, line 7:** before "pin", delete "the" and insert - - said - - .

**Claim 15, line 8:** after "providing", delete " second operational" and insert - - an attenuation - - .

**Claim 15, line 10:** replace [ switchable "in" and "out" and when switched "in" ] with

- - switched between a signal coupling mode and a non-signal coupling mode, and when switched to said signal coupling mode - - .

**Claim 15, line 11:** before "pin" , delete "the" and insert - - said - - .

**Claim 15, line 11:** after "pin", delete "." and insert - - , wherein impedance present at said pin when the second signal is switched to said signal coupling mode is lower than impedance present at said pin when the second signal is switched to said non-signal coupling mode . - -

6. **Claims 6,7,10-12,14,15,16 and 18** are allowed.

Art Unit: 2644

The following is an examiner's statement of reasons for allowance: Prior art Monti (US 5,557,236) discloses an integrated circuit with a bidirectional pin. Prior art Spiridon (US 6,507,173) discloses a single chip power management unit apparatus and method. Prior art Sendelweck (US 5,045,733) discloses a switching apparatus with cascaded switch sections. Prior art Sendelweck (US 5,117,123) discloses diode switch providing temperature compensated DC bias for cascaded amplifier. Prior art Paulos et al. (US 5,594,44) discloses a configuration programming of a digital audio serial port using no additional pins including wherein connection of an external digital signal is made to an IC pin used for switching a digital de-emphasis circuit. Prior art Trask (US 4,021,737) discloses a system for processing and transmitting audio signals received from a television set for reproduction by a high fidelity FM receiver. Prior art Krauter et al. (US 5,506,457) discloses electronic switch for decoupling. Although some of the prior art discloses some elements of the claim, the prior art or combination thereof fails to disclose or make obvious the invention as a whole including a means for providing de-emphasis function to a first signal at a pin of an integrated circuit, the first signal being intrinsic to the integrated circuit and means for providing an attenuation function to the first signal, means for coupling a second signal extrinsic of the integrated circuit to said pin so that the means for providing an attenuation function operates on the second signal, the second signal capable of being switched in and out or off and on depending upon the impedance present at said pin. Therefore the prior art or combination thereof fails to disclose or make obvious a signal processing system as claimed and a circuit for switchably coupling a signal as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DEF

  
**XU MEI**  
**PRIMARY EXAMINER**